REMARKS

The Examiner's action of April 16, 2004 is noted in which the claims are variously rejected under 35 USC 112 and under 35 USC 102 and 103 based on the Housand et al. and Messina '381 references.

Applicants have amended the claims to eliminate the 35 USC 112 rejections.

The rejection of the claims under either the Housand et al. or the Messina '381 reference or a combination of the two is now addressed.

At the outset, both of the references relate to the same type of system, completely different from the claimed system. These two references relate to a system that has an "internal" optical mechanical system to align both the passive IR sensor and the active sensor. The approach of both systems looks at an onboard common reference source and uses that to align both systems. In these references, both the passive and the active systems are looking at this reference laser source and develop the boresight error which is used to correct the aiming systems for both the IR detector and the laser.

What will be eminently clear is that nowhere in these references is there any comparison of the detected position of a laser-illuminated target in a threat cloud with the IR-detected position of the target.

Moreover, nowhere is shown or taught the problem solved of using a pencil-thin laser to illuminate a target selected by the IR detector. Note that the pencil-thin laser beam is on the order of 15 microradians, whereas tactical target illumination systems such as in Housand et al and Messina '381 usually have beams on the order of 150 microradians. The narrowness of the beam gives rise to the problem that one has when one scans the target threat cloud with a narrow

beam in that the laser beam often misses the target identified by the IR detector. Thus one has to scan around to find the target detected by the IR detectors. This scan time is oftentimes excessive when the two boresight axes are misaligned. In the claimed invention this problem is solved, not with an internal alignment laser, but by noting the difference in position of the IR-detected target and the laser-detected target and correcting one boresight or the other by cranking in the offset.

Nowhere in the references is the above problem taught, much less the claimed solution.

Thus, in the references cited there is no scanning laser, and there is no procedure that involves measuring the offset between the target as seen by the IR detector versus the target as seen by the laser.

It will be appreciated, since neither of the two cited references teach the subject system, their combination cannot teach the subject system.

In point of fact, the problem solved by the subject system by reducing the time it takes to acquire a target in a threat cloud is nowhere addressed in either of these two cited references.

It is therefore Applicants' contention that the claims are in condition for allowance. Allowance of the claims and issuance of the case is therefore earnestly solicited.

Respectfully submitted,

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Date: May 29, 2004